antibodies - online.com







anti-CD74 antibody (Biotin)





Overview

Quantity:	100 μg
Target:	CD74
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD74 antibody is conjugated to Biotin
Application:	Flow Cytometry (FACS), Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP), Immunocytochemistry (ICC)

Product Details

Immunogen:	Human CD74 invariant chain synthetic peptide
Clone:	PIN-1
Isotype:	lgG1
Specificity:	Detects \sim 33-35 kDa protein doublet corresponding to the molecular mass of the p33 and p35 forms of human CD74.
Cross-Reactivity:	Human, Mouse
Purification:	Protein G Purified

Target Details

Target:	CD74

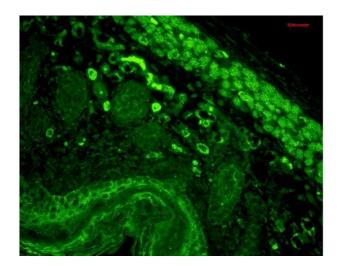
Target Details

Alternative Name:	CD74 (CD74 Products)
Background:	CD74 is a non-polymorphic type II integral membrane protein. It has a short N-terminal
	cytoplasmic tail of 28 amino acids, followed by a single 24-aa transmembrane region and an
	approximately 150-aa lumenal domain (1). The CD74 chain is thought to function mainly as an
	MHC class II chaperone, which promotes ER exit of MHC class II molecules, directs them to
	endocytic compartments, prevents peptide binding in the ER, and contributes to peptide editing
	in the MHC class II compartment. Class II MHC and Ii expression was believed to be restricted
	to classical antigen-presenting cells (APC), however, during inflammation, other cell types,
	including mucosal epithelial cells, have also been reported to express class II MHC molecules
	(2). Experiments that investigate cell-surface CD74 are complicated by the fact that CD74
	remains on the cell surface for a very short time. The surface half-life of CD74 was calculated to
	be fewer than 10 minutes (3). CD74 however has also recently been shown to have a role as an
	accessory-signaling molecule because of its high-affinity binding to the pro-inflammatory
	cytokine, macrophage migration-inhibitory factor (MIF) (3). The restricted expression of CD74
	by normal tissues and its very rapid internalization make CD74 an attractive therapeutic target
	for both cancer and immunologic diseases (4).
Gene ID:	972
NCBI Accession:	NP_001020329
UniProt:	P04233
Pathways:	Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune
	Response, Negative Regulation of intrinsic apoptotic Signaling, Cancer Immune Checkpoints
Application Details	
Application Notes:	• WB (1:1000)
	• IHC (1:100)
	• ICC/IF (1:50)
	 optimal dilutions for assays should be determined by the user.
	1 μg/ml of ABIN2481708 was sufficient for detection of CD74 in 20 μg of PALA cell lysates by
Comment:	r pg/mil of / Elive-roll was sufficient for detection of OD/ + iii 20 pg of i / E/ (cell rysaces by
Comment:	colorimetric immunolot analysis using goat anti-mouse IgG: AP as the secondary antibody.
Comment: Restrictions:	
	colorimetric immunolot analysis using goat anti-mouse IgG: AP as the secondary antibody.

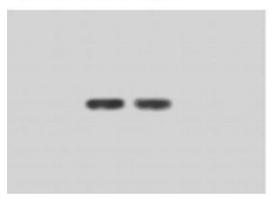
Handling

Concentration:	1 mg/mL
Buffer:	PBS pH 7.2, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C

Images



Isotype CD74 MIFcontrol control CD74



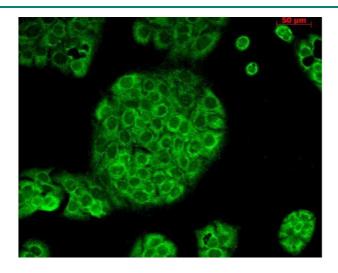
35 kDa

Immunohistochemistry

Image 1. Immunohistochemistry analysis using Mouse Anti-CD74 Monoclonal Antibody, Clone PIN 1.1 . Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Beautiful basal to suprabasal staining in epidermis, dermis, hair follicles and muscle.

Western Blotting

Image 2. Western Blot analysis of Human N87 cell lysates showing detection of CD74 protein using Mouse Anti-CD74 Monoclonal Antibody, Clone PIN 1.1 . Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:1000. Lysates treated with macrophage inhibitory factor (MIF). Courtesy of: Victor E. Reyes, University of Texas Medical Branch, USA.



Immunofluorescence (fixed cells)

Image 3. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-CD74 Monoclonal Antibody, Clone PIN 1.1 . Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20°C. Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Cytoplasmic Staining.

Please check the product details page for more images. Overall 4 images are available for ABIN2481708.